surface science

Abstracted/indexed in: Aluminium Industry Abstracts; Chemical Abstracts; Current Contents: Physical, Chemical and Earth Sciences; EI Compendex Plus; INSPEC; Metals Abstracts.

Contents

Volume 396 (1998) Nos. 1–3

Surface Science Letters

Diffusion of adsorbate atoms on the reconstructed Si(111) surface
K. Cho and E. Kaxiras L261

Surface Science

A test of electronegativity equalization during fluorinated ethanol decomposition on Pt(331)
Y. Cong and R.I. Masel 1

Epitaxial growth of ultrathin Pt films on basal-plane sapphire: the emergence of a continuous atomically flat film
M.L. Hildner, T.J. Minvielle and R.J. Wilson 16

Empirical potential study of the chemisorption of C_2H_2 and CH_3 on the β-SiC(001) surface
A.J. Dyson and P.V. Smith 24

Ab initio HF/DFT studies of the chemisorption of hydrogen on the cluster simulated Si(111)-$(\sqrt{3}\times\sqrt{3})$R30°-Al and -Ga surfaces
S. Wang, M.W. Radny and P.V. Smith 40

Visualization of precipitation induced crystallographic shear planes as one-dimensional structures on surfaces: an STM and RHEED study on TiO_2(110)
H. Nörenberg, R.E. Tanner, K.D. Schierbaum, S. Fischer and G.A.D. Briggs 52

Tilted adsorption of benzene on Pt(110)1 × 2
P. Zebisch, M. Stichler, P. Trischberger, M. Weinelt and H.-P. Steinrück 61

Anti-corrugation and nitrogen c(2 × 2) on Cr(100): STM on atomic scale and quantitative LEED
M. Sporn, E. Platzgummer, M. Pinczolits, W. Hebenstreit, M. Schmid, W. Hofer and P. Varga 78

Photoelectron diffraction as a tool for the study of a buried interface during heteroepitaxial growth of Sb/Ge/Si(111)
C. Westphal, S. Dreiner, F. Sökeland and H. Zacharias 87

Diffraction spot profile analysis for vicinal surfaces with long-range order
J. Wollschläger, F. Schäfer and K.M. Schröder 94

Structural study of activated nitrogen adsorbed upon (100), (210) and associated stepped (*hk*0) nickel faces
J.C. Boulliard and M.P. Sotto 107

Coverage- and temperature-dependent site occupancy of carbon monoxide on Rh(111) studied by high-resolution core-level photoemission
A. Beutler, E. Lundgren, R. Nyholm, J.N. Andersen, B.J. Setlik and D. Heskett 117

Chemical ordering and reconstruction of $Pt_{25}Co_{75}$(100): an LEED/STM study
Y. Gauthier, P. Dolle, R. Baudoing-Savois, W. Hebenstreit, E. Platzgummer, M. Schmid and P. Varga 137

Adsorption of CO and NO on (111) and (100) surfaces of Pd_3Mn compared with Pd: a theoretical approach
F. Delbecq, B. Moraweck and L. Vérité 156

Growth of Al_2O_3 stripes in NiA(001)
R.-P. Blum, D. Ahlbehrendt and H. Niehus 176

The initial stages of Cu electrodeposition on Ag(100): an in situ STM study
M. Dietterle, T. Will and D.M. Kolb 189

On the potential-dependent etching of Si(111) in aqueous NH_4F solution
R. Houbertz, U. Memmert and R.J. Behm 198

Formation of the nitrogen shape resonance in N_2^+ and $N_2^*(A^3\Sigma_u^+)$ collisions with metallic surfaces
P. Stracke, F. Wiegershaus, S. Krischok and V. Kempter 212

Evidence for the suppression of incident beam effects in Auger electron diffraction
I. Davoli, R. Gunnella, R. Bernardini and M. De Crescenzi 221

A quasi-equilibrium model for the uptake kinetics of hydrogen atoms on Si(100)
M.C. Flowers, N.B.H. Jonathan, A. Morris and S. Wright 227

Evidence for tilted chains on the diamond (111)-(2 × 1) surface
W.J. Huisman, M. Lohmeier, H.A. van der Vegt, J.F. Peters, S.A. de Vries, E. Vlieg, V.H. Etgens, T.E. Derry and J.F. van der Veen 241

Contents continued on final page

For more information on SURFACE SCIENCE please visit our website which is accessible via the Elsevier Surfaces & Interfaces HomePage at http://www.elsevier.nl/locate/surfaces.

0039-6028(19980120)396:1-3;1-M

contents continued

Structure of the diamond (111)-(2 × 1) surface revisited with ion scattering
W.J. Huisman, J.F. Peters and J.F. van der Veen 253

Direct evidence for the β-hydride elimination mechanism in the decomposition of triethylgallium on GaAs(100)
K.C. Wong, M.T. McEllistrem, B.G. McBurnett, R.D. Culp, A.H. Cowley and J.G. Ekerdt 260

Deconvolution of pyrite, marcasite and arsenopyrite XPS spectra using the maximum entropy method
A.R. Pratt, N.S. McIntyre and S.J. Splinter 266

Self-accelerating kinetics of CO_2 formation on Ir(110)
U. Burghaus, J. Ding and W.H. Weinberg 273

Deuterium and deuterium sulfide adsorption on MoS_2(0001)
C.G. Wiegenstein and K.H. Schulz 284

Atomic structures of Ag islands on Si(001)(2 × 1)
Y.W. Kim, N.G. Park, W.S. Cho, K.H. Chae, C.N. Wang, K.S. Kim, S.S. Kim and D.S. Choi 295

Photo-induced dissociation of H_2S on GaAs(100)
H.H. Huang, Z. Zou, X. Jiang and G.Q. Xu 304

Structure evolution for annealing Co ultrathin films on Pt(111)
J.S. Tsay and C.S. Shern 313

Rotated incommensurate domains of Co ultrathin films on Pt(111)
J.S. Tsay and C.S. Shern 319

Collision-induced desorption (CID) of NO from Pt{111}: a comparison between the CID binding energy and the activation energy for thermal desorption
D. Velic and R.J. Levis 327

NEXAFS and TDP studies of molecular adsorption of hydrocarbons on Cu(100): segmental correlations with the heats of adsorption
A.V. Teplyakov, A.B. Gurevich, M.X. Yang, B.E. Bent and J.G. Chen 340

Structure determination of small particles by HREM imaging: theory and experiment
J.A. Ascencio, C. Guttiérez-Wing, M.E. Espinosa, M. Marín, S. Tehuacanero, C. Zorrilla and M. José-Yacamán 349

Competition between atomic and molecular desorption
S.H. Payne, Z. Jun and H.J. Kreuzer 369

Study of the adsorption of hydrogen and oxygen on Si(100) using positron-annihilation induced Auger electron spectroscopy (PAES)
J.H. Kim, G. Yang and A.H. Weiss 388

Reflection high-energy electron diffraction analysis of the InSb{111}A,B-(2 × 2) surfaces
A. Ohtake and J. Nakamura 394

Voltammetric and spectroscopic characterization of cyanide adlayers on Pt(*h*,*k*,*l*) in an acidic medium
F.J. Huerta, E. Morallón, J.L. Vazquez and A. Aldaz 400

Photoemission electron microscopy of Schottky contacts
M. Giesen, R.J. Phaneuf, E.D. Williams and T.L. Einstein 411

Photodecomposition of 1,1,2-trichloroethane: spectroscopic evidence for vinyl formation on Pt(111)
G.S. Hsiao, W. Erley and H. Ibach 422

Erratum 431

Announcements 433

Author index 437

Subject index 440

Materials index 445